

Appl. No. 10/668,172
Amendment dated: August 16, 2005
Reply to OA of: May 16, 2005

Amendments to the Drawings:

Please replace sheet one of the original drawings with replacement sheet one in which figure 2 has been amended and as found at the end of this paper and marked "Replacement Sheet".

Appl. No. 10/668,172
Amendment dated: August 16, 2005
Reply to OA of: May 16, 2005

REMARKS

Applicants have amended the specification, drawings and claims to more particularly define the invention taking into consideration the outstanding Official Action. Applicants most respectfully submit that all the claims now present in the application are in full compliance with 35 U.S.C. §112 and are clearly patentable over the references of record.

Reconsideration of the present patent application is respectfully requested in view of the following remarks.

I. Response to Objection on the Drawings Under 37 CFR 1.83(a)

The Examiner indicates that the drawings must show every feature of the invention specified in the claims. Therefore, the rhombus protrusions (claim 1) and convex pillar lens (claim 3) must be shown or feature(s) canceled from the claim(s).

Response:

Accordingly, Applicants have amended the "rhombus protrusions" to the "triangular-type protrusions" throughout the specification of the present application to conform the specification with the drawings as recognized by the Examiner in the Official Action.

Figure 2 has been corrected by replacing one of the reference numeral "132" with the correct reference numeral 133. Therefore, the drawings now show every feature of the invention specified in the claims of the present patent application. Accordingly, this objection has been obviated and it is most respectfully requested that this objection be withdrawn.

II. Response to Objections to the Specification

The Examiner indicates that the disclosure is objected to because of the following informalities:

Appl. No. 10/668,172
Amendment dated: August 16, 2005
Reply to OA of: May 16, 2005

In the brief description of drawings (page 3, line 1) "FIG 1" should be "FIG1a".

Response:

Accordingly, Applicants have amended "FIG 1" to "FIG1a" in the brief description of drawings of the specification, as required by the Examiner. Accordingly, it is most respectfully requested that this objection be withdrawn.

In addition, Applicants have amended the "rhombus protrusions" to the "triangular-type protrusions" throughout the specification of the present application to conform the specification with the drawings as recognized by the Examiner in the Official Action.

III. Response to Rejections Under 35 U.S.C. § 103

The Examiner rejects claims 1-3, 5 and 7-8 under 35 U.S.C. § 103(a) as being unpatentable over the US Drain et al., US 2003/0206256 A1 in view of Wang, US 2002/0041441 A1. This rejection has been carefully considered but is most respectfully traversed.

Response:

Applicants have canceled claim 8 of the present patent application and amended claim 1, as shown in the aforesaid listings of claims to specify that the included angle is from 30 to 90 degrees. This amendment is supported by the specification as originally filed in view of the indication that preferred angle is 30 degrees and the range of from 0 to 90 degrees. Also, a further dependent claim 9 specifies that the angle is 30 degrees, see example 2 of Applicants' specification.

Please refer to Fig. 7, Fig. 8 and the specification in column [0058] of the cited reference (Drain et al., US 2003/0206256 A1). The top panel 16 of Drain et al. has the first protrusions 64 on the "top surface", while having the second protrusions 76 on the "bottom surface". The first protrusions 64 may differ from the second protrusions 76 in size, shape, and/or orientation. But as shown in Fig 7 and Fig. 8, the orientation

Appl. No. 10/668,172

Amendment dated: August 16, 2005

Reply to OA of: May 16, 2005

direction of the first protrusions 64 on the "top surface" of the top panel 16 is "parallel" to that of the second protrusions 76 on the "bottom surface" thereof.

And as shown in Fig. 1 of the other cited reference (Wang et al., US 2002/0041441 A1), a plurality of parallel strips 31 are formed on the both sides the optical elements 30. Again, the orientation direction of the parallel strips 31 on the "top" side of the optical element 30 is also "parallel" to that of the parallel strips 31 on the "bottom" side thereof.

On the contrary, as shown in Fig. 1a and Fig. 1b of the present patent application, the orientation direction of the straight trenches with an arc cross-section on the bottom surface of the composite micro-structured sheet is "not parallel" to that of the triangular-type protrusions formed on the top surface thereof. There is a "non-zero" included angle between the orientation direction of the straight trenches with an arc cross-section and the triangular-type protrusions, which ranges from 30 to 90 degrees.

Therefore, anyone skilled in the art cannot anticipate the "non-parallel" orientation of the protrusions formed on both sides of the composite micro-structured sheet of the present patent application by the "parallel" orientation of the top and bottom protrusions of the optical elements 30 (Drain et al.), and in view of the "parallel" orientation of the parallel strips 31 of the optical element 30 (Wang et al.).

Furthermore, to more clearly differ the composite micro-structured sheet of present patent application from those of the two cited reference, Applicants respectfully amend claim 1 of the present patent application by adding the description related to the included angle between each straight trench with an arc cross-section and the respective triangular-type protrusion. Accordingly, it is most respectfully requested that this rejection be withdrawn.

Applicants note the objection to the Taiwan Patent 271472 which was filed without a publication date as required by 37 CFR 1.98(b)(4) and therefore has not been considered. Accordingly, Applicants submit herewith a further copy and a form 1449

Appl. No. 10/668,172
Amendment dated: August 16, 2005
Reply to OA of: May 16, 2005

which also includes the publication date and request acknowledgment of receipt and consideration of this reference in the next Official Action.

CONCLUSION

In view of the foregoing remarks, reconsideration and allowance of the application are now believed to be in order, and such action is hereby solicited.

Respectfully submitted,

BACON & THOMAS, PLLC

By: 
Richard E. Fichter
Registration No. 26,382

625 Slaters Lane, 4th Fl.
Alexandria, Virginia 22314
Phone: (703) 683-0500
Facsimile: (703) 683-1080

REF:kdd
A02.wpd

August 16, 2005